

Patent Claims:

1. Pigment paste which comprises as binder at least  
one polyurethane acrylate (P) which is obtainable  
5 by polymerizing, in an organic solvent or in a  
mixture of organic solvents,
- (A) ethylenically unsaturated monomers, or a  
mixture of ethylenically unsaturated  
10 monomers, in the presence of
- (B) a polyurethane resin (B) which has a number-  
average molecular weight of from 200 to  
30,000, preferably from 1000 to 5000, and  
15 which contains on average from 0.05 to 1.1,  
preferably from 0.2 to 0.9 and, with  
particular preference, from 0.3 to 0.7  
polymerizable double bonds per molecule, and  
converting the resulting reaction product  
20 into an aqueous dispersion,
- characterized in that the pigment paste comprises
- (Pa) from 10 to 35 % by weight of at least  
25 one polyurethane acrylate resin (P),  
based on the solids content,

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(Pb) from 10 to 65 % by weight of water and

(Pc1) from 18 to 40 % by weight of at least  
one organic, transparent pigment or from  
30 to 50 % by weight of at least one  
organic, opaque pigment, or

(Pc2) from 30 to 80 % by weight of at least  
one inorganic pigment, with the  
exception of white pigments, or from  
more than 50 to 70 % by weight of white  
pigment, or

(Pc3) from more than 8 to 15 % by weight of  
carbon black,

the proportions by weight of the respective  
components (Pa) to (Pc) being based in each case  
on the overall weight of the pigment paste.

2. Pigment paste according to Claim 1, characterized  
in that it comprises

(Pa) from 15 to 25 % by weight of at least  
one polyurethane acrylate resin (P),  
based on the solids content,

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(Pb) from 20 to 50 % by weight of water and

5 (Pc1) from 24 to 35 % by weight of at least  
one organic, transparent pigment or from  
33 to 45 % by weight of at least one  
organic, opaque pigment, or

10 (Pc2) from 38 to 50 % by weight of at least  
one inorganic pigment, with the  
exception of white pigments, or

15 (Pc3) from 9 to 12 % by weight of carbon  
black,

the proportions by weight of the components (Pa)  
to (Pc) being based in each case on the overall  
weight of the pigment paste.

20 3. Pigment paste according to Claim 1 or 2,  
characterized in that it additionally comprises  
one or more of the following constituents

25 (Pd) from 0 to 10 % by weight, preferably from 3  
to 8 % by weight, of at least one dispersing  
auxiliary and/or

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(Pe) from 0 to 10 % by weight, preferably from 1 to 5 % by weight, of one or more organic solvents and/or

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(Pf) from 0 to 10 % by weight, preferably from 2 to 4 % by weight, of one or more binders other than polyurethane (P) (based on solids) and/or

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(Pg) from 0 to 20 % by weight, preferably from 2 to 10 % by weight, of one or more fillers and/or extenders and/or

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(Ph) from 0 to 15 % by weight, preferably from 1 to 15 % by weight, of one or more customary auxiliaries and/or additives,

the proportions by weight of components (Pd) to (Ph) again being based in each case on the overall weight of the respective pigment paste.

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4. Pigment paste according to one of Claims 1 to 3, characterized in that it has a solids content of from 25 to 85 % by weight, preferably from 40 to 70 % by weight, and/or a pH of from 7 to 9,

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preferably from 7.5 to 8.5, and/or a viscosity, at a temperature of 23°C and a shear rate of 1000 s<sup>-1</sup>, of from 50 to 800 mPa.s, preferably from 100 to 300 mPa.s.

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5. Pigment paste according to one of Claims 1 to 4, characterized in that the pigment/binder ratio in the pigment paste is between 5:1 and 0.5:1, preferably between 3:1 and 2:1.

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6. Aqueous paint, characterized in that it comprises one or more pigment pastes according to one of Claims 1 to 5.

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7. Aqueous paint according to Claim 6, characterized in that it comprises from 10 to 60 % by weight, preferably from 15 to 30 % by weight, of at least one pigment paste according to one of Claims 1 to 5.

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8. Aqueous paint according to Claim 6 or 7, characterized in that it comprises as binder at least one polyurethane acrylate (P), alone or together with other binders.

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9. Method of coating substrates, characterized in that an aqueous paint according to one of Claims 6 to 8 is applied.
- 5 10. Method according to Claim 9, characterized in that the aqueous paint according to one of the claims is employed to prepare a topcoat finish, in particular as a solid-colour basecoat.
- 10 11. Use of the pigment pastes according to one of Claims 1 to 5 for preparing aqueous paints for the coating of car bodies, especially in the field of production-line finishing.
- 15 12. Use of the pigment pastes according to one of Claims 1 to 5 for preparing radiation-curable paints.
- 20 13. Mixer system for the preparation of aqueous coating compositions, characterized in that the mixer system comprises two or more pigment pastes according to one of Claims 1 to 5.

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